

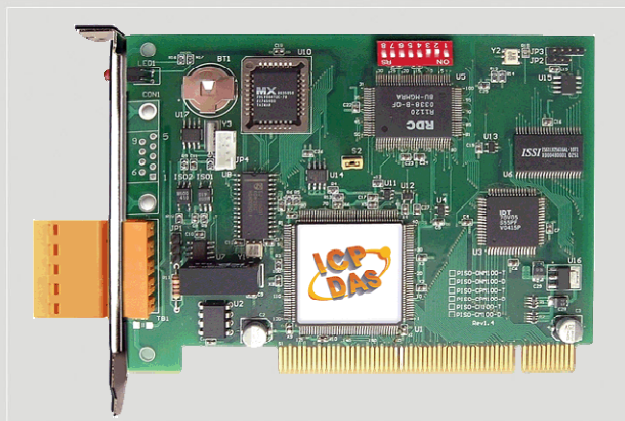


# DeviceNet Series Products

## 1 Port Intelligent DeviceNet Master Board



**PISO-DNM100-D**



**PISO-DNM100-T**

DeviceNet is a simple low cost open industrial networking system. It provides the communication service needed by various types of applications such as sensor, switches, bar-code scanner, AC/DC drives etc. DeviceNet supports the Master/Slave connection model. The PISO-DNM100 module acts the DeviceNet master device and communicates with the remote slave devices. There is a complete DeviceNet protocol firmware in the PISO-DNM100. The users can easily access the slave device via PISO-DNM100 by using DLL library functions and need not to deal with the complex DeviceNet protocol. The users can use as easy as “Read/Write” functions to access slave I/O data.

### Features

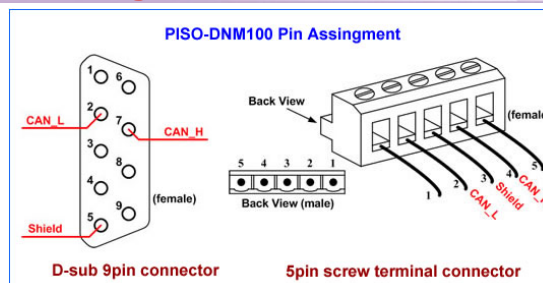
- DeviceNet Version: Volume I & II, Release 2.0
- Programmable Master MAC ID and Baud Rate.
- Baud Rate: 125K, 250K, 500K
- Support Group 2 and UCMM connection
- I/O Operating Modes: Poll, Bit-Strobe, Change of State / Cyclic
- I/O Length: 512 Bytes max (Input/Output) per slave
- Slave Node : 63 nodes max
- Support Auto-Search slave device function.
- Support on-line adding and removing devices
- Support Auto-detect Group 2 and UCMM device
- Auto-Reconnect when the connection is broken
- LED: Status , ERR

### Utility Features

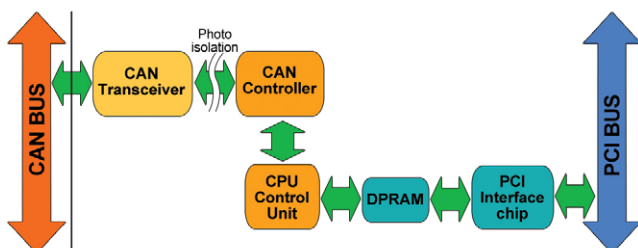


This utility supports to search all devices and specific devices in the network and can configure the I/O connection of the devices by searching devices or manual setting. It can easily to access the I/O data of all the slave devices.

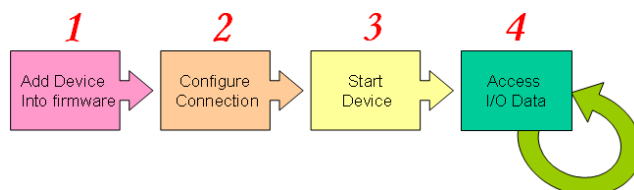
### Pin Assignments



### Block Diagram



### Establish Connection Flowchart



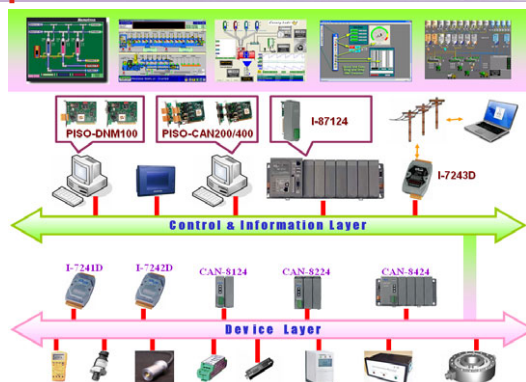
## Hardware Specifications

Item	PISO-DNM100
Bus Type	33MHz 32bit 5V PCI bus(V2.1) plug and play mechanism
CPU	80186, 80MHz
On Board Memory	512K bytes SRAM, 512K bytes FLASH ROM
EEPROM	2K bytes
NVRAM	32K bytes
Watch Dog Timer	Built-in Dual-Watchdog protection
CAN bus interface	ISO/IS 11898-2, Sub D9 connector or 5-pin screw terminal connector
CAN Controller	Phillips SJA1000T CAN Controller
CAN Transceiver	Phillips 82C250 CAN Transceiver
CAN Frequency	16 MHz CAN controller frequency
CAN Protocol	CAN 2.0A/2.0B
Isolated	2500Vrms on CAN side
Terminal Resister	120Ω terminal resister selected by jumper
DPRAM	PCI interface with DPRAM memory mapping
LED indicators	Green and Red LEDs
Power Consumption	+ 5V@300 mA
Operating Temp.	0°C to 60°C
Storage Temp.	-20°C to 8°C
Humidity	Humidity: 0~90% non-condensing
Dimensions	Short PC plug-in card, Dimensions: 130mm X 110mm (W x H)

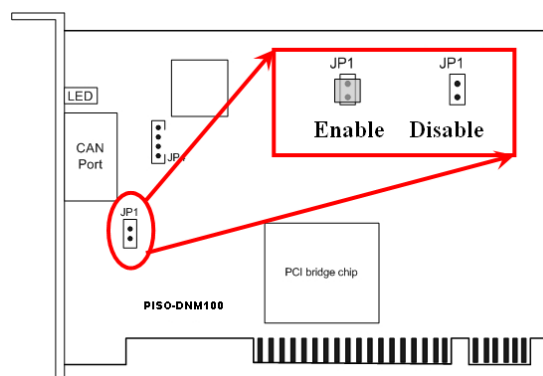
## LED indicators

LED	Status	Description
Green LED	Off	The firmware is not running
	Twinkle	The DeviceNet firmware is waiting for configuration.
	On	This indicates that the DeviceNet firmware is running. The PISO-DNM100 is communicating with the slave devices.
Red LED	Off	there is no error on the bus and about the MAC ID
	twinkle	This indicates that there are errors on the bus which maybe the situations as shown bellow: (a) The CAN connector doesn't connect to the slave devices. (b) The power of the slave devices is off. (c) The MAC ID collision between master and slave devices is occurring.

## Application



## Terminal Resistor



## Ordering Information

PISO-DNM100	1 Port Intelligent DeviceNet Master Board
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